

On the *Chalcididæ* of the Island of Grenada, B.W.I. By L. O. HOWARD, Ph.D., Entomologist to U.S. Department of Agriculture. (Communicated by F. DUCANE GODMAN, F.R.S., F.L.S., on behalf of the Committee for Investigating the Flora and Fauna of the West-Indian Islands.)

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OF the collection of parasitic Hymenoptera made by Mr. H. H. Smith on the Island of Grenada during the spring of 1891, under the auspices of the West India Committee, Mr. Ashmead has already reported upon the Ichneumonidæ, Braconidæ, Cynipidæ, and Proctotrypidæ, in the Proceedings of the Zoological Society of London, 1895, pp. 742-812. The Chalcididæ, forming the rest of the collection, are described in the following pages. The collection in this family was not a large one. Mr. Smith informs me that he made no especial effort to collect the insects of this group. There were, nevertheless, between six and seven hundred specimens, among which the writer has found 132 species, of which 72 are new and 60 have previously been described. Representatives of six new genera have also been found. The general facies of the collection is similar to that of the collection from St. Vincent, and the occurrence of 72 new species must not be taken to indicate that a large proportion of these species cannot also be found by careful collecting upon the Island of St. Vincent. Of the 60 previously-described species here recorded, 50 are known to occur also upon the Island of St. Vincent, 42 of them having been described for the first time in the companion paper on the parasitic Hymenoptera of St. Vincent, *Linnean Journal, Zool.*, vol. xxv. Of the remainder, 4 are found in Cuba and Central America, 2 in Brazil, and 1 only in Florida and St. Vincent. Six are parasites of scale insects, and are likely to be carried to any country with their hosts on cultivated plants. All of these 6 are found in Florida, 1 only in Florida and Texas, 4 in the southern United States generally, 2 in California, 1 in Japan, and 1 in Italy, the last two having also been found in several localities in the United States. One (*Spalangia nigra*) is a common European parasite of the house-fly. This species is not abundant in the United States, and, in fact, I have seen it only from the West Indies.

The insects of this family are far too little known in their South and Central American and West Indian distribution to

suggest even the most tentative generalizations on the material studied. It is true that a number of Chalcididæ from Central America have been described by Mr. Cameron, but Mr. Smith's method of collecting differed so greatly from that of the naturalists engaged in collecting for the 'Biologia Centrali-Americana,' that it is not fair to generalize on the rather radical difference in character between the specimens studied by Mr. Cameron and those collected by Mr. Smith.

Family CHALCIDIDÆ.

Subfamily CHALCIDINÆ.

SPILOCHALCIS, *Thomson*.

SPILOCHALCIS FEMORATUS.

Crabro femoratus, *Fabr. Syst. Ent.* p. 375, no. 10 (1775).

Sphex punctata, *Fabr. Spec. Ins.* i. p. 446 (1781).

? *Chalcis fasciata*, *Oliv. Enc. Méth.* v. p. 439, no. 9 (1790).

Smicra subpunctata, *Walk. Ent. Mag.* ii. p. 25 (1834).

Smicra nigropicta, *Cress. Proc. Ent. Soc. Phil.* iv. p. 55 (1865).

Smicra dorsivittata, *Cameron, Biol. Cent.-Am., Hym.* i. p. 90, pl. v. fig. 2.

Smicra femorata (*Fabr.*), *Kirby, Linn. Journ., Zool.* xvii. p. 66.

Spilochalcis femoratus (*Fabr.*), *Howard, Linn. Journ., Zool.* xxv. p. 79.

Mr. Smith took in all 27 male and female specimens of this species. They were captured under diverse conditions. Several came to light at night, others were flying at sunset about cocoa orchards, and others were found under decaying leaves on a damp rock. It is apparently a very abundant Indian and Central American species.

SPILOCHALCIS FULVESCENS.

Smicra fulvescens, *Walker, Ent. Mag.* ii. p. 25.

Smicra fulvescens, *Walker, Cresson, Trans. Am. Ent. Soc.* iv. p. 56.

Spilochalcis fulvescens (*Walker*), *Howard, Linn. Journ., Zool.* xxv. p. 79.

There are 21 male and female specimens of this species from Grenada, exhibiting a great variation in size, and taken by Mr. Smith under the same diverse conditions as the preceding species.

SPILOCHALCIS TRANSITIVA.

Smicra transitiva, *Walker, Trans. Ent. Soc. Lond.* ser. 3, v. i. p. 371 (E. Fla.).

Smicra pulchra, Cresson, *Proc. Ent. Soc. Phil.* iv. p. 94 (Cuba).

Smicra pulchra, Cresson, *Trans. Am. Ent. Soc.* iv. p. 50 (Mex. Can.).

Smicra transitiva, Walker, Cresson, *Trans. Am. Ent. Soc.* iv. p. 57 (E. Fla.).

A single male was taken by Mr. Smith, February 20, at an elevation of 250 feet, on the bank of a shady stream under decaying leaves on a damp rock. It should probably be separated generically from *Spilochalcis* on account of the femoral armature.

SMICRA, *Spinola*.

SMICRA CRESSONI, sp. n.

♀. Length 3·6 mm.; expanse 5·2 mm. Scape of antennæ three-fourths as long as flagellum. Petiole more than twice as long as rest of the abdomen, and rather longer than the head and thorax together. Hind coxæ three-fourths as long as petiole. Head faintly shagreened in the ocellar space, longitudinally striate on the face; furnished with close short white pile each side of the insertion of the antennæ; antennal groove with a central carina below, reaching towards the top of the head as far as the middle of the groove; short, sparse, white hairs on lower face. Mesonotum delicately rugose transversely, almost aciculate. General colour black and honey-yellow. The centre of each of the thoracic sclerites black, margins yellow; head black above, lower face honey-yellow; margins of eyes and those of antennal groove yellowish; antennæ dark above, yellowish below; abdomen black above, yellowish on first segment, and another yellowish band a little before the middle; tip yellowish; petiole black; front and middle legs entirely pallid with a tinge of yellowish; hind coxæ honey-yellow below, black above, the black extending nearly to the lower side in an indefinite band on the distal third of the coxa; hind femora mottled, honey-yellow, blackish, and lighter yellow, the blackish predominating above; hind tibiæ yellowish with a darker central band. Femoral teeth 13 in number, small, dark in colour.

Described from three female specimens, one swept from herbage, April 7, elevation 250 feet, and the others taken under similar circumstances, April 25.

The species comes closest to *S. debilis* (Say), but differs in its longer scape and longer hind coxæ. It resembles rather closely *S. meteori* of the writer's manuscript, reared from *Meteorus hyphantriæ*, Riley, in the district of Columbia.

CHALCIS, *Fabricius*.

CHALCIS ANNULATUS.

Chalcis annulatus, *Fabr. Ent. Syst.* ii. p. 197-9; *Syst. Piez.* p. 167.

Chalcis annulatus, *Fabr.*, *Howard* (redescription), *Linn. Journ., Zool.* xxv. p. 80.

Mr. Smith took 36 male and female specimens at many different spots.

ANTROCEPHALUS, *Kirby*.

ANTROCEPHALUS PUNCTIGERUS.

Chalcis punctigera, *Fabr. Syst. Piez.* p. 167 (S. A.).

Antrocephalus punctigerus, *Howard, Linn. Journ., Zool.* xxv. p. 81.

Three male and four female specimens.

NOTASPIS, *Walker*.

NOTASPIS FORMICIFORMIS.

Notaspis formiciformis, *Walker, Ent. Mag.* ii. p. 37 (St. Vincent).

Notaspis formiciformis, *Howard, Linn. Journ., Zool.* xxv. p. 83 (St. Vincent).

Mr. Smith took only a single male of this remarkable Chalcidid. It was captured at light at night.

PODAGRION, *Spinola*.

PODAGRION BRASILIENSIS.

Podagrion brasiliensis, *Howard, Linn. Journ., Zool.* xxv. p. 83 (St. Vincent and Brazil).

Mr. Smith captured four females and one male at light at night and in the house on window.

Subfamily EUCHARINÆ.

KAPALA, *Cameron*.

KAPALA FURCATA.

Eucharis furcata, *Fabr. Syst. Piez.* p. 158.

Eucharis flabellata, *Fabr. l. c.*; *Walker, Entomologist*, i. pl. P. fig. 2.

Chirocerus furcatus, *Brullé, Nat. Hist. d. Ins., Hym.* iv. p. 571, t. 38. fig. 5.

Thoracantha furcata, *Hal. Entom.* i. pl. P. fig. 2.

Kapala furcata, *Cameron, Biol. Cent.-Am., Hym.* i. pl. v. fig. 17 (Costa Rica, Guatemala, Panama, S. C.).

Kapala furcata, *Howard, Linn. Journ., Zool.* xxv. p. 84 (St. Vincent).

One male, captured March 31, at an elevation of 1900 feet, on foliage near the ground, near water.

STILBULA, *Spinola*.

STILBULA GRENADENSIS, n. sp.

♀. Length 1.8 mm.; expanse 5.3 mm. Scape very short; pedicel round; funicle-joint 1 very long and slender, 2 half as long as 1 and a little thicker, remaining joints gradually decreasing in length and of about the same thickness; club ovate, nearly twice as long as preceding joint. Face with strong, close, longitudinal fasciculæ; punctation nearly joining below insertion of antennæ, but separated by a well-rounded ridge; ocelli nearly in a straight line; middle ocellus very slightly advanced; mesoscutum with close hexagonal punctation; mesoscutellum with same punctation very much drawn out longitudinally. General colour honey-yellow; eyes reddish; head black above, brownish on lower face; abdomen dark brown, nearly black at tip; mesopleura brown; mesonotum with brownish markings defining parapsides and a brown stripe down centre of scutellum; scutellar projections blackish; antennal scape and pedicel light honey-yellow; flagellum darker; wings hyaline.

Described from one female specimen, Balthazar (windward side), 1900 feet elevation, on foliage on ground at a damp spot near water.

The species resembles closely *S. nigriceps* of Ashmead's MS., collected at Chapada, Brazil, by Mr. H. H. Smith. It is considerably smaller, and the markings are less vivid.

ORASEMA, *Cameron*.

ORASEMA CAMERONI, sp. n.

♀. Length 1.9 mm.; expanse 4.4 mm. Head and face closely and rather finely punctate; disc of mesoscutum coarsely and transversely shagreened, parapsides smoother, with a close row of coarse punctures in dividing sutures; mesoscutellum coarsely shagreened longitudinally and with partial longitudinal striations; metanotum rugose; propleura nearly smooth, slightly shagreened towards head; mesopleura rather coarsely shagreened; petiole longitudinally striate; hind coxæ very faintly shagreened. Colour metallic blue-green, head and thorax greenish, with coppery reflections on scapulæ; abdomen bluish; antennal scape, all tibiæ and tarsi, and hind femora honey-yellow; flagellum of antennæ, all coxæ, and front and middle

femora, except at tips, brown, the front femora slightly metallic. Wings hyaline; wing-veins light brown.

One female, Balthazar, April 7, swept from herbage.

ORASEMA SMITHI, sp. n.

♀. Length 1·7 mm.; expanse 3·8 mm. Head and face closely and more finely punctate than in preceding species; entire mesonotum rather uniformly and closely punctate, a little more coarsely on mesoscutum than on head, and still more so on scutellum; metanotum rather coarsely punctate, subrugulose, propleura delicately aciculate; mesopleura closely and finely punctate; petiole finely granulate, not striate; hind coxæ faintly punctured. General colour uniform metallic blue; all coxæ metallic; scape and legs pallid, front and middle femora a little darker. Wings as with preceding species.

In the type specimens the enormous mandibles are widely extended, the left showing three teeth and the right four.

One female, Balthazar, April 7, swept from herbage.

Subfamily PERILAMPINÆ.

PERILAMPUS, *Latreille*.

PERILAMPUS POLITIFRONS.

Perilampus politifrons, *Howard*, *Linn. Journ.*, *Zool.* xxv. p. 85 (St. Vincent).

Three males taken in the house on windows.

PERILAMPUS PARVUS, sp. n.

♀. Length 1·6 mm.; expanse 3·5 mm. Differs from *P. politifrons* mainly in sculpture of the mesonotum. Instead of close punctures, each umbilicate puncture is distinctly separated from its neighbours by a flattened space; the general surface delicately shagreened transversely between circular punctures; border of parapsides smooth; metanotal nucha not transversely striate but with several coarse longitudinal striations; occiput transversely aciculate; face smooth round insertion of anteunæ. faintly shagreened on cheeks. General colour black, slightly metallic; flagellum of antennæ yellowish brown, pedicel darker; mandibles and all tibiæ brown; in other respects like *P. politifrons*.

One female, Mount Gay estate, April 1, 250 feet, taken in house on window.

Subfamily TORYMINÆ.

IDARNES, *Walker*.

IDARNES CARME.

Idarnes carme, *Walker, Ann. & Mag. Nat. Hist.* xii. p. 47 (St. Vincent)
Five females, Balthazar, March 2 to April 15.

COLYASTICHUS, *Mayr*.

COLYASTICHUS FLAVUS, sp. n.

♀. Length of body 0·88 mm.; ovipositor 0·35 mm.; expanse 1·8 mm. Antennal scape short, not reaching to middle ocellus; pedicel obconical, twice as long as wide; ring-joints plain; funicle-joints well separated, subequal in length and breadth, each about as broad as long, except terminal, which is slightly broader than long; club oval, flattened, about as long as three preceding funicle-joints together. Body slender, nearly smooth, shining, mesoscutum and scutellum very faintly shagreened longitudinally. General colour honey-yellow; ocelli reddish; flagellum of antennæ dark brown; mesoscutellum, dorsum of first and second abdominal segments, and ovipositor black. Wings hyaline, veins very light.

One female, Mount Gay estate, April, at light at night.

SYNTOMASPIS, *Foerster*.

SYNTOMASPIS PUNCTIFRONS.

Syntomaspis punctifrons, *Ashmead, Linn. Journ., Zool.* xxv. p. 154,
♂ (St. Vincent).

Two females, Mount Gay estate, March 31, 1900 feet.

TORYMUS, *Dalman*.

TORYMUS VENTRALIS, sp. n.

♂. Length 1·16 mm.; expanse 2·2 mm. Antennæ short; scape not reaching to middle ocellus; flagellum slightly longer than face; club strongly flattened. Head and thorax with fine squamose sculpture. General colour bright golden green with strong reflections; ocelli red; antennæ dark honey-yellow, scape and pedicel lighter than funicle, and club darker; legs pallid, including front coxæ, hind tibiæ darker; abdomen honey-yellow except for a large dark central spot above which extends down on sides to some extent. Wings hyaline, veins light brown.

Two males, Mount Gay estate, 250 feet, April 6 and 7, one on foliage in second-growth woods, and the other at light at night.

TORYMUS PALLIDIPES.

† *Torymus pallidipes*, *Ashmead, Linn. Journ., Zool.* xxv. pp. 153-4, ♀ (St. Vincent).

One male of what is probably this species, Chantilly estate, April 6, 400 feet, high growth of weeds in young nutmeg orchard.

Subfamily EURYTOMINÆ.

ISOSOMODES, *Ashmead.*

ISOSOMODES GIGANTEA.

Isosoma gigantea, *Ashmead, Trans. Am. Ent. Soc.* xiii. 1886, p. 127 (Florida).

Isosomodes gigantea, *Ashmead, Linn. Journ., Zool.* xxv. p. 59 (St Vincent).

One female, Mount Gay estate, April 2, 1900 feet, upon shore of lake.

ASHMEADIA, *Howard.*

ASHMEADIA MEGASTIGMA.

Ashmeadia megastigma, *Ashmead, Linn. Journ., Zool.* xxv. p. 145 (St. Vincent).

Two females, one male, Mount Gay estate, April 1, sea-level. April 6, 250 feet; on foliage near road in dry second-growth woods.

ASHMEADIA PULCHRA.

Ashmeadia pulchra, *Ashmead, Linn. Journ., Zool.* xxv. p. 145 (St Vincent).

One male, Mount Gay estate, April 6, 250 feet, on road in dry second-growth woods on foliage.

ASHMEADIA COLLARIS, sp. n.

♂. Length 1.9 mm.; expanse 3.0 mm. Resembles *A. pulchra*, *Ashmead*; differs mainly in coloration. General colour yellowish white; disc of mesoscutum brownish; parapsides with brown centre; disc of mesoscutellum also brownish, in the form of a broad central stripe not reaching to tip; metanotum and petiole of abdomen, pleural sutures and border of hind coxæ, as well as broad stripe above and below abdomen, also brownish; occiput

nearly black; small blackish spot inclosing ocelli; antennal groove immediately at base of antennæ, blackish, and a brownish stripe from base of antennæ to clypeus. The most obvious colorational difference is in the fact that the pronotum is entirely yellowish and does not possess the four brown stripes characteristic of *pulchra*.

One female, Balthazar, March 5, 250 feet.

EVOXYSOMA, *Ashmead*.

EVOXYSOMA VITTATUM, sp. n.

♀. Length 3·2 mm.; expanse 4·3 mm. Antennæ with short scape, bulbous pedicel; funicle-joints 1 to 5 decreasing in length, joint 1 nearly twice as long as 2, club distinctly 2-jointed, terminal joint indistinct, as long as two preceding funicle-joints together; ocelli in curved line; head, pronotum, and mesonotum coarsely umbilicate-punctate; metanotum with a broad shallow central emarginate groove, the groove transversely striate; either side of groove umbilicate-punctate; abdomen smooth, shining, mesopleura distinctly and finely punctate; pilosity of mesonotum white, abundant on fore border; metanotal fimbria long, white; margin of joints 4 and 5 of abdomen with long whitish hairs; pygidium closely set with white pile. General colour reddish yellow; club of antennæ blackish; ocellar spot, border of occipital foramen, front of pronotum where impinging on head, parapsides and anterior border of disc of mesoscutum, all of metanotum, mesopleura, petiole, segments 1, 2, and 3 of abdomen, except for a lateral spot on each side of the centre of joint 3 above, stripe down centre of joint 4, margins of joints 5 and 6 and pygidium, black; eyes dark red; wing-veins brown; all legs honey-yellow; coxæ a little darker.

Described from one female, Balthazar, April 15, 250 feet, shady place near stream.

DECATOMIDEA, *Ashmead*.

DECATOMIDEA COMPACTUM, sp. n.

♀. Length 2·8 mm.; expanse 3·7 mm. Scape moderate; pedicel short, triangular; funicle-joints 1 to 5 subequal in length and breadth, each a trifle longer than pedicel; club long, ovate-acute, slightly flattened, longer than two preceding funicle-joints together; head, pro- and metanotum finely umbilicate-punctate;

ocelli forming a long curved line dividing the vertex into four subequal portions; anterior border of mesoscutum finely aciculate transversely; hind coxæ and mesopleura finely shagreened; metanotum rather coarsely rugoso-punctate; median furrow faintly indicated, apparently diverging anteriorly; entire surface of abdomen faintly shagreened; segment 4 practically including the later ones; 1, 2, and 3 subequal in length. Colour black, shining; all legs and all of antennæ honey-yellow; tip of pygidium also honey-yellow; pedicel of antennæ brownish; wing-veins yellow-brown.

Described from one female, Lake Antoine estate, March 24, swept from herbage.

EURYTOMA, *Illiger*.

EURYTOMA CRESSONI, sp. n.

♀. Length 2·9 mm.; expanse 4·0 mm. Antennæ with short scape; short triangular pedicel; funicle-joint 1 distinctly longer than pedicel; joints 2, 3, 4, and 5 shorter than 1, very slightly increasing in width; club ovate, not acute, slightly wider than funicle-joint 6 and a little longer than 5 and 6 together; head, pro- and mesonotum closely and finely umbilicate-punctate, the pronotal articulating surface densely and finely shagreened; anterior articulating border of mesoscutum also finely shagreened transversely; mesopleura closely and finely punctate, smooth at dorsal posterior border; proximal portion of hind coxæ and all of abdomen closely and finely shagreened; metanotum with broad, semicircular, central portion, which is closely and finely punctate; this space surrounded by an irregular groove and at upper outer margin with two or three larger deeper punctures; on either side of this central space the sclerite is coarsely rugoso-punctate; metanotal fimbria dense and short; pygidial pubescence short and sparse. General colour black; antennæ dark brown; all legs, including front and middle coxæ, honey-yellow; hind coxæ blackish, with a yellowish longitudinal stripe above; venter of abdomen mahogany colour, this coloration extending dorsally to a considerable extent on apical half of fourth joint.

♂. Funicle-joints of antennæ regularly arched above, all subequal in length; club nearly twice as long as preceding joint, its first joint not well distinguished from the second; central space of metanotum much smaller than in female; petiole closely

and finely punctate; abdomen perfectly smooth, shining. Hind coxæ as well as remainder of all legs honey-yellow; abdomen with only a trace of the mahogany colour below at base.

Described from one female and one male specimen, Balthazar; the latter March 2, 250 feet, second-growth thicket; and the former April 5, 250 feet, open place on bush at sunset.

EURYTOMA WALSHI, sp. n.

♀. Length 2·9 mm.; expanse 4·0 mm. Differs from preceding species in colour and in the following structural characters:—Anterior articulating margin of mesoscutum densely and finely punctate, not transversely shagreened; mesopleura more coarsely punctate, with three longitudinal carinæ and the rather coarse sub-longitudinal punctures impinging upon each carina, finely granulate posteriorly; hind coxæ densely punctate; entire disc of metanotum closely and finely granulate; at anterior centre are two shallow foveæ forming apparently the beginning of a central groove: sides of the metanotum rugoso-punctate; abdomen perfectly smooth, not delicately shagreened. Colour black; antennæ very dark brown, nearly black; front and middle femora and tibiæ, and hind tibiæ, honey-yellow; all coxæ black, hind femora nearly all black, yellowish at either extremity; wing-veins light.

♂. Length 2·3 mm. Funicle-joints concave in the middle above, each appearing, therefore, double-humped, the hair-whorl given off at each hump; club distinctly 3-jointed, the basal joint not separated from the rest by a petiole; discal space of metanotum not so broad as with female. Colour like that of female, except that basal half of scape is honey-yellow; remainder of antennæ jet-black.

Described from six females and three males, Mount Gay estate, April 3, 250 feet, some swept from herbage, others taken in house on window.

EURYTOMA MAYRI, sp. n.

♀. Length 3·0 mm.; expanse 4·7 mm. Antennæ in proportion of joints resemble preceding species; articulating-surface of pronotum and mesoscutum finely shagreened transversely, the latter smooth at anterior margin; metanotum lacking the broad central disc; irregularly rugoso-punctate, with a faint indication of a central longitudinal furrow; coxæ closely punctured; mesopleura

closely and finely punctured; abdomen smooth, except segments 5 and 6 and pygidium, which are faintly shagreened; metanotal fimbria sparse, short. Colour black; antennal scape, all tibiæ and tarsi and middle femora honey-yellow; front and hind femora black; middle femora and hind tibiæ slightly brownish in centre; wing-veins dark brown.

♂. Length 2·3 mm. Funicle-joints 2 and 3 with moderate double humps, 1 and 4 not concave in the middle; basal joint of club set off with a distinct petiole from remainder of club. Colour as in female, except that front femora are honey-yellow.

Described from two females and two males, Granville, St. George's, and Mount Gay estates, March 1 to April 9; sea-shore to 250 feet, under varying conditions.

Subfamily PIRENINÆ.

HERBERTIA, *Howard*.

HERBERTIA LUCENS.

Herbertia lucens, *Howard, Linn. Journ., Zool.* xxv. p. 98.

One female specimen, Balthazar (windward side), swept from herbage near a stream.

EROTOLEPSIA, *Howard*.

EROTOLEPSIA COMPACTA.

Erotolepsia compacta, *Howard, Linn. Journ., Zool.* xxv. p. 100.

One male, Mount Gay estate (leeward side), swampy forest near sea-shore.

Subfamily SPALANGIINÆ.

SPALANGIA, *Latreille*.

SPALANGIA NIGRA.

Spalangia nigra, *Latreille, Gen. Crust. et Ins.* iv. p. 29 (Europe).

Spalangia nigra, *Ashmead, Linn. Journ., Zool.* xxv. p. 57 (St. Vincent).

One male, Balthazar, April 15, 300 feet, shady spot near stream. A parasite of the house-fly in Europe.

SPALANGIA IMPUNCTA, n. sp.

♀. Length 1·58 mm.; expanse 2·4 mm. Head elongate, flattened, with a sharp median groove from anterior ocellus to clypeus; smooth, with a few very faint sparse punctures and sparse pubescence; eyes very hairy. Flagellum of antennæ a trifle more

than one-third longer than scape; first funicle-joint closely joined to pedicel; club as long as three preceding funicle-joints together. Pro- and mesonotum smooth, shining; scutellum with no transverse row of punctures; metanotum finely punctate at border, disc with a double row of punctures confluent behind. Petiole a little longer than hind coxæ, longitudinally aciculate. Colour black; tarsi whitish.

One female, Balthazar, March 5, 250 feet. Closely related to *S. drosophila*, Ashm., from Florida.

Subfamily PTEROMALINÆ.

Tribe *Chiropachides*.

ACROCORMUS, *Foerster*.

ACROCORMUS MEGASTIGMUS.

Acrocormus megastigmus, *Ashmead, Linn. Journ., Zool.* xxv. p. 155 (St. Vincent).

One female, March 31 (Grand Étang), 1900 feet, on foliage near the ground, near water, damp.

Tribe *Sphegigastrides*.

SYNTOMOPUS, *Walker*.

SYNTOMOPUS INCISOIDEUS, n. sp.

♀. Length 2.2 mm.; expanse 3.6 mm. Head broader than thorax, oval from front, narrowly ellipsoidal from above; face plainly carinate below insertion of antennæ; ocelli forming a very obtuse-angled triangle, the lateral ones dividing the space between eyes into three equal parts; genal sulcus faintly indicated at border of eye. Antennæ inserted somewhat below middle of face, short; scape slender, not reaching to middle ocellus; funicle-joints transverse, except first, which is somewhat longer than broad; flagellum as a whole subclavate, club obtusely rounded. Thorax rather flattened above; metanotum with a complete central longitudinal carina, lateral carinæ distinct; petiole with two delicate longitudinal carinæ; abdomen behind petiole with a strong, large, oval depression. Head and thorax, including metanotum, all pleura, bases of coxæ, and petiole of abdomen closely punctate; abdomen smooth, shining. General colour metallic green, somewhat æneous on mesoscutum and scutellum, bluish on pleura and petiole; antennal scape brown,

flagellum black; all coxæ and femora metallic; tibiæ dark brown, yellowish at either end. Wings hyaline, veins light.

One female, Chantilly estate, 700 feet, March 14, on herbage in cocoa orchard.

POLYCYSTUS, *Westwood.*

POLYCYSTUS LUTEIPES, sp. n.

♂. Length 1·6 mm.; expanse 3·1 mm. Head somewhat broader than thorax, when seen from above concave behind and convex in front; clypeal margin of face straight, cheeks very slightly rounded, genal sulcus very faint, entire; terminal joint of palpi as long as one-fourth width of head, nearly as broad as long. Antennæ inserted below middle of face, scape reaching above middle ocellus; pedicel twice as long as broad; ring-joints distinct; funicle-joints each a trifle longer than broad, cylindrical; club oval, flattened, as long as the two preceding funicle-joints together. Head, thorax, including pleura, and petiole of abdomen closely and finely punctate except metanotum, which, with middle and hind coxæ, is finely shagreened; abdomen smooth, shining. General colour bright bronze-green; scape and first five funicle-joints of antennæ, palpi, base of mandibles, and all legs except coxæ bright straw-coloured, almost orange; tips of mandibles, base of pedicel above, sixth funicle-joint, and all of club except extreme tip, brown. Wings hyaline; tegulæ and wings light brown.

Two males, one Balthazar, April 3, 250 feet, swept from herbage, and the other Mount Gay estate, April 6, 250 feet, road in dry second-growth woods, on foliage.

POLYCYSTUS NIGRITUS, sp. n.

♀. Length 1·7 mm.; expanse 2·8 mm. Head considerably broader than thorax, very slightly convex in front and concave behind; clypeal margin and cheeks straight; genal sulcus indicated at margin of eyes only; palpi normal. Antennæ inserted just below middle of face; scape not reaching to middle ocellus; pedicel slightly longer than broad; funicle-joint 1 one half longer than broad, remaining funicle-joints decreasing slightly in length and increasing very slightly in width; club pointed, ovate, very nearly as long as two preceding funicle-joints together. Punctuation as with preceding species, except that metanotum is finely punctate, with pronounced median carina and smooth

nucha. Thorax above and top of head with sparse white scaly pile. General colour black, slightly glistening and faintly metallic in some lights; antennal scape, tegulæ, all trochanters, tips of femora, and all tibiæ light brown. Wings hyaline, veins light brown.

Three females, Balthazar and Mount Gay estate, April 3-10, 250 feet, one taken in house on window and the others swept from herbage.

POLYCYSTUS NIGRISCAPUS, sp. n.

♀. Length 1·7 mm. ; expanse 2·9 mm. Differs from *P. nigrinus* in the following particulars :—Head only slightly broader than thorax ; cheeks rounded ; genal sulcus not indistinct. Antennæ inserted far below middle of face ; pedicel twice as long as wide ; funicle shortened, joints 5 and 6 considerably wider than long ; club oval, flattened, as long as three preceding funicle-joints together. Metanotal characters cannot be made out in the single badly-mounted specimen. Thorax with no scaly pile. Antennal scape black, yellowish at extreme base.

One female, Mount Gay estate, 250 feet, April 6, in dry second-growth woods on foliage.

Tribe *Mischogastrides*.

HALTICOPTERA, *Spinola*.

HALTICOPTERA SUBPETIOLATA, sp. n.

♂. Length 2·2 mm. ; expanse 4·0 mm. Head subtriangular ; petiole distinct, rugose, twice as long as wide ; head broader than pronotum ; head, pro- and mesonotum closely and finely punctulate ; metanotum finely shagreened, with distinct median and lateral carinæ ; petiole closely punctate, with distinct and complete dorsal median longitudinal carina, and with anterior and median lateral projections ; abdomen smooth, glistening. Antennæ rather stout ; scape reaching to middle ocellus ; ring-joints distinct ; funicle-joint 1 stouter but shorter than pedicel, about as long as broad ; remaining funicle-joints subequal in length, but increasing very slightly in width ; club oval, flattened. Thorax convex ; second segment of abdomen longer than all others together. General colour metallic green ; head and thorax dull metallic green except hind margin of pronotum and except metanotum, which are bright and glistening ; abdomen

with brilliant reflections; antennæ rather dark brown, scape rather lighter than flagellum; tegulæ light brown; all legs uniformly honey-yellow.

One male, Mount Gay estate, April 1, swampy forest near sea-shore.

Tribe *Diparides*.

LELAPS, *Haliday*.

LELAPS PULCHRICORNIS.

Lelaps pulchricornis, *Haliday MS.*, *vide Walker, Ann. & Mag. Nat. Hist.* ser. 1, xii. p. 47, ♀ (St. Vincent).

Lelaps pulchricornis, *Ashmead, Linn. Journ., Zool.* xxv. p. 156, ♂ ♀ (St. Vincent).

Twenty-three males and females, Grand Étang, Balthazar, Mt. Maitland, and Mirabeau estate, March 2 to April 5, 250 to 1900 feet, under varying conditions, usually near streams.

LELAPS FLAVESCENS.

Lelaps flavescens, *Ashmead, Linn. Journ., Zool.* xxv. p. 156, ♂ ♀ (St. Vincent).

Nine males and females, seven Balthazar, one Mt. Maitland, and one Mirabeau estate; those at Balthazar collected June 11, 250 feet, flying at sunset after heavy rain.

Tribe *Pteromalides*.

PTEROMALUS, *Swed.*

PTEROMALUS RUGOSOPUNCTATUS.

Pteromalus rugosopunctatus, *Ashmead, Linn. Journ., Zool.* xxv. p. 165, ♂ ♀ (St. Vincent).

Many males and females, collected under varying conditions at different points.

SPINTHERUS, *Thomson*.

SPINTHERUS DUBIUS.

Spintherus dubius, *Ashmead, Linn. Journ., Zool.* xxv. p. 159, ♀ (St. Vincent).

Two females, Chantilly estate, April 6, 400 feet, high growth of weeds in nutmeg orchard.

The species is doubtfully placed in *Spintherus* by Mr. Ashmead.

MERAPORUS, *Walker.*

MERAPORUS NIGROCYANEUS.

Meraporus nigrocyaneus, *Ashmead, Linn. Journ., Zool. xxv. p. 159, ♂*
(St. Vincent).

Two males, Balthazar, March 5 and May 2, 250 feet.

GLYPHE, *Walker.*

GLYPHE PUNCTATA.

Glyphe punctata, *Ashmead, Linn. Journ., Zool. xxv. p. 162, ♀* (St. Vincent).

One female, Balthazar, April 3, 250 feet, swept from herbage.

CATOLACCUS, *Thomson.*

CATOLACCUS VULGARIS.

Catolaccus vulgaris, *Ashmead, Linn. Journ., Zool. xxv. p. 164, ♂ ♀*
(St. Vincent).

Many specimens of both sexes from a number of localities, taken under varying conditions.

CATOLACCUS CARINATUS, sp. n.

♂ ♀. Closely resembles *C. vulgaris*, but differs quite markedly in metanotal structure. In *C. vulgaris* the metascutellum has a faint median longitudinal carina which sometimes is simply a slight rounded elevation, the nucha not especially differentiated, and the whole sclerite finely punctate except at posterior border. In the present species the median longitudinal carina is sharp and pronounced and the nucha, which is as long as the body of the sclerite, is differentiated by a transverse slightly arched carina. The whole sclerite is delicately transversely shagreened. The antennal flagellum is black and longer than in *C. vulgaris*, and the punctation of the thorax somewhat finer.

Three females, Mount Gay estate and St. George's, March 2 to April 10, 250–300 feet—one at light at night, one under rotting weeds, and one in house on window.

Subfamily EUPELMINÆ.

EUPELMUS, *Dalman.*

EUPELMUS PALLIDIPES.

Eupelmus pallidipes, *Ashmead, in manuscript supplement to Report on the Parasitic Hymenoptera of St. Vincent.*

One female, Balthazar, April 3, 250 feet, swept from herbage.

EUPELMUS RETICULATUS, sp. n.

♂. Length 2·3 mm.; expanse 4·0 mm. Antennæ short, subclavate, club flattened; funicle-joints club-shaped, subequal except 1, which is smaller. Eyes strongly hairy, distant. Head finely rugoso-punctate; mesonotum reticulate, reticulations of scutellum finer than on scutum; pronotum imbricate-punctate; metanotal carina complete, stout, lateral spaces smooth, shining; pleura and outer side of hind coxæ finely reticulate; abdomen smooth, but with very many short dark hairs on posterior two-thirds. Colour metallic blue-green; head steel-blue; pleura purplish; legs light reddish brown, hind femora metallic on outer third, hind tibiæ dark at tip; antennal scape concolorous with legs; flagellum black; wings hyaline, veins dark brown, nearly black.

Two males, Mount Gay estate, April 6, 400 feet, high growth of weeds in young nutmeg orchard.

Subfamily ENCYRTINÆ.

ÆNASIUS, *Walker*.

ÆNASIUS HYETTUS.

Encyrtus hyettus, *Walker, Ann. Mag. Nat. Hist.* xvii. (1846) p. 881. St. Vincent.

Ænasia hyettus, *Howard, Linn. Journ., Zool.* xxv. (1894) p. 89. St. Vincent.

Six females, three males, Granville, Mount Gay estate, and Balthazar, all on trailing plants growing on sand at the sea-shore, except the Mount Gay estate specimen, which was taken in the house on window.

TANAONEURA, gen. nov.

♀. Antennæ 11-jointed with an additional ring-joint, inserted at middle of face; scape slender; pedicel short; funicle-joints subequal in length and width, each nearly twice as long as pedicel. Facial depression moderate, carina short, sharp; eyes distinct, ocelli at corners of a very obtuse-angled triangle; occipital margin somewhat rounded. Thorax elevated, metanotum abruptly declivous; legs stout, front femora somewhat swollen; middle tibial spur rather short. Wings ample; marginal vein one-third as long as submarginal; stigmal very long; longer than marginal, postmarginal slightly longer than stigmal, marginal

somewhat thickened, postmarginal nearly as thick as marginal. Abdomen short, ovipositor slightly extruded.

TANAONEURA ASHMEADI, sp. n.

♀. Length 1·7 mm.; expanse 3·8 mm. Antennal club shorter than two preceding funicle-joints together. Face finely shagreened and with moderately large, dense punctures; mesoscutum rugulose, opaque, scutellum finely shagreened; mesopleura longitudinally aciculate towards dorsal margin, smooth and shining ventrally; abdomen smooth, shining; axillæ meet at tips. General colour black, without metallic lustre; antennal scape, all tibiæ and tarsi and all trochanters honey-yellow; all femora black; wings hyaline, veins dark yellow-brown.

One female, Mirabeau estate, March 25, 500 feet, on herbage near stream.

BOTHRIOTHORAX, Ratzeburg.

BOTHRIOTHORAX INSULARIS, sp. n.

♀. Length 2·1 mm.; expanse 3·4 mm. Axillæ just meet at tips. Punctures of head large, close and round; punctures of mesoscutum somewhat elongate and shallower posteriorly; axillæ smooth, shining; scutellum rounded at tip, not at all emarginate, smooth, shining, with a faint trace of striations at cephalic margin; mesopleura very faintly shagreened; head and mesonotum with moderately strong and sparse black hairs, the six or eight at tip of scutellum bending toward head and apparently tending slightly towards the formation of a scutellar tuft. Eyes faintly hairy. Joint 1 of antennal funicle a little longer than pedicel; joint 2 shorter than 1; remaining joints subequal in length but increasing in width to club which is ovate, not obliquely truncate as with most species, and as long as two preceding funicle-joints together; flagellum densely clothed with short hairs, which however do not obscure the joints. General colour black, with faint metallic reflections; antennal scape, apical half of middle tibiæ, all of front tibiæ, and all tarsi honey-yellow.

♂. Antennæ moniliform; relative length of joints about as in female, which it resembles in other respects.

Described from four females and three males, Mount Gay estate and Chantilly estate, nearly all 400 feet, in young nutmeg orchard in high growth of weeds.

CHILONEURUS, *Westwood*.

CHILONEURUS FUNICULUS, sp. n.

♀. Length 1·7 mm.; expanse 3·2 mm. An interesting form which seems intermediate between *Comys* and *Chiloneurus*, and for which the generic characters of *Chiloneurus* must be extended to include forms in which the first funicle-joint is longer than pedicel. Scape long, slender; pedicel short, triangular; funicle-joint 1 twice as long as pedicel and nearly three times as long as thick; joints 3, 4, 5, and 6 each rapidly broadening and becoming shorter, 5 wider than long; club (broken off in type-specimen). Eyes moderately approximate; ocelli at angles of a slightly acute-angled triangle. Head closely and finely shagreened; mesoscutum with closely appressed silvery hairs; axillæ meeting at tips; mesoscutellum very finely punctate, opaque; mesoscutellar tuft strong and black; metanotum shining, metallic, fimbria strong; mesopleura faintly shagreened. Marginal vein somewhat longer than stigmal; stigmal and post-marginal very short, separated by a very narrow angle and of nearly equal length; stigmal, if anything, slightly longer: below submarginal is a hyaline transverse band, rest of the wing fuscous, lighter at extreme tip; on fuscous portion discal cilia very dense, with a slight oblique hairless band below marginal vein, extending proximally to hyaline band; cilia costad of this streak stronger than elsewhere on disc. Colour variegated: scape, antennæ, front coxæ, tibiæ and femora, middle femora and hind coxæ honey-yellow; flagellum of antennæ black; head and face brownish, with faint metallic reflections; mesoscutum black, colour obscured by the silvery pubescence; axillæ light brown; scutellum with its anterior half dull light yellow, posterior half brown; metanotum metallic green; mesopleura brown, with metallic greenish and purplish reflections; abdomen brown, with brilliant metallic green spot above at base; middle coxæ and tibiæ and hind femora and tibiæ nearly black; front and hind tarsi brown, middle tarsi honey-yellow; front tibiæ on upper side with a narrow metallic longitudinal stripe.

Described from one female specimen, St. John's River, March 27, 250 feet, cocoa orchard.

CHILONEURUS NIGRESCENS, sp. n.

♀. Length 1·4 mm.; expanse 2·6 mm. Belongs to the same group as the preceding species. Antennæ very distant at in-

sersion ; antennal depression very broad, and distinguished by a curved line above ; scape slender, short, shorter than in preceding species ; pedicel moderate, triangular ; funicle-joint 1 equal in length and width to pedicel, joints 2 to 6 increasing rapidly in width to club, subequal in length ; club broad, flattened, nearly as long as three preceding funicle-joints together. Eyes approximate ; ocelli very small, at angles of an acute-angled triangle. Pronotum with golden pubescence ; mesonotum with close silvery pubescence ; scutellar tuft extremely long, longer than scutellum itself, black in colour. Marginal vein longer than stigmal, very thick ; stigmal and postmarginal extremely short, the former a little longer than the latter, which is almost wanting ; angle between the two fully 45 degrees : the whole surface of the fore wing rather deeply infuscated, with hyaline stripe near base and a similar hairless streak below marginal vein ; beginning of a faint hyaline transverse streak at tip of stigmal. Lower part of face smooth, front finely shagreened, vertex smooth ; mesopleura finely shagreened. General colour black, shining ; more or less metallic purplish reflections on face below, on mesopleura, mesonotum, and abdomen ; mesoscutellum and axillæ dark brown ; middle coxæ black, front and hind coxæ brown ; hind femora and tibiæ black, front femora and tibiæ brown, middle femora and tibiæ brown, femora lighter than tibiæ ; tarsi whitish.

One female specimen, Balthazar, April 7, 250 feet, in weedy place near stream.

COMYS, *Foerster*.

COMYS BICOLOR.

Comys bicolor, *Howard, Ann. Rep. U.S. Dept. Agric.* 1880, p. 362. District of Columbia.

Two females, Balthazar, April 7, 250 feet, open weedy place. One specimen is much darker than the other, and than the type-specimen from the district of Columbia ; it is not, however, to be separated structurally.

LEPTOMASTIX, *Foerster*.

LEPTOMASTIX DACTYLOPII.

Leptomastix dactylopii, *Howard, Bull. 5, Div. Entom. U.S. Dept. Agric.* 1885, pp. 23-24. District of Columbia.

Leptomastix dactylopii, *Howard, Linn. Journ., Zool.* xxv. p. 92. St. Vincent.

One male, Balthazar, April 7, 250 feet, open woody place; and one female, Chantilly estate, April 6, 400 feet, in high growth of weeds in young nutmeg orchard.

BLASTOTHRIX, *Mayr.*

BLASTOTHRIX INSOLITUS, sp. n.

♀. Length 1.35 mm.; expanse 2.7 mm. Scape inserted at border of mouth, furnished with a broad leaf-like expansion below; pedicel subcylindrical, longer than first funicle-joint; funicle-joints 1 to 6 longer than wide, subcylindrical, increasing slightly in width; club somewhat flattened, oval, nearly as long as three preceding funicle-joints together; ocelli forming a slightly acute-angled triangle; axillæ slightly separated at tips. Marginal vein distinct, as long as stigmal, postmarginal apparently lacking; stigmal entering disc of wing at broad angle. Head and mesonotum densely, closely, and very finely punctate, not glistening; scape black, except for a white band near tip; pedicel black at base, elsewhere white; funicle-joint 1 black, remaining funicle-joints and club yellowish white; head and mesothorax dark orange-yellow; pronotum of same colour, but covered with dense whitish pile; the same whitish pile occurs on mesonotum, but is sparse; abdomen and metanotum black above, abdomen somewhat yellowish below; all legs yellowish white; wings milky, veins dark brown.

Described from one female specimen, Granville, April 9, on trailing plant growing on sea-shore.

APHYCUS, *Mayr.*

APHYCUS FLAVUS.

Aphycus flavus, *Howard, Ann. Rep. U.S. Dept. Agric.* 1880, p. 365. Palatka, Fla.

One female, Balthazar, April 7, 250 feet, on herbage near stream. There is a series of specimens of this species in the U.S. National Museum from Brownsville, Texas.

APHYCUS AMGENUS, sp. n.

♂. Length 0.88 mm.; expanse 2.0 mm. Scape broadly widened below, the widening abrupt at tip; pedicel longer than broad; funicle-joints 1 to 4 almost moniliform, of equal length and width, 5 to 6 broader, subequal in length and width; club slightly flattened, oval, not wider than funicle-joint 6, and a

little longer than 5 and 6 together; vertex broad; ocelli large and brilliantly coloured, forming a slightly acute-angled triangle. General colour orange-yellow; scape black, white at extreme tip; pedicel black at base, white at tip; remainder of flagellum dusky; pronotum with a whitish border and a distinct black spot at each shoulder; tegulæ dirty white; abdomen and metanotum black above, the abdomen with black centre below, whitish at sides; all legs and pleura dirty white; wings hyaline, veins dusky.

One male, Balthazar, June 11, 250 feet, flying at sunset after heavy rain.

ENCYRTUS, *Dalman*.

ENCYRTUS SUBMETALLICUS, sp. n.

♀. Length 1.0 mm.; expanse 2.2 mm. Scape long, slender, not expanded, reaching to middle ocellus; flagellum subcylindrical; pedicel three times as long as broad; first funicle-joint about half as long as pedicel, remaining funicle-joints subequal in length, each slightly longer than joint 1 and increasing almost imperceptibly in width; club long ovate, not wider than funicle-joint 6, flattened from side, plainly divided into three equal joints and nearly as long as three preceding funicle-joints together; funicle-joints slightly hairy. Head semicircular in profile; antennæ distant at base; facial depression triangular; eyes approximate, naked; ocelli rather close together, forming a nearly right-angled triangle; thorax nearly flat, mesoscutellum slightly elevated; axillæ well separated at tips; vertex very finely shagreened, mesoscutum rather more coarsely shagreened; mesoscutellum densely and finely punctate, except at posterior border which is smooth; mesopleura smooth, shining; abdomen smooth. Fore wings rather narrow, marginal vein very short, postmarginal lacking; stigmal very short; wings hyaline, with a yellow-brown cloud below stigmal, extending backwards nearly to base of wing. General colour black, slightly metallic; head piceous, mesoscutum with slight greenish reflections, mesoscutellum with bronzy reflections, mesopleura with purplish reflections; underside of abdomen, all legs, and scape of antennæ below light honey-yellow; scape above and flagellum brown.

Three females, Chantilly estate and Balthazar, April 6, 400 feet, on high weeds in young nutmeg orchard; April 7, 250 feet, near stream.

ENCYRTUS MODERATUS, sp. n.

♀. Length 0·93 mm.; expanse 1·8 mm. Scape of antennæ slightly swollen, short; pedicel triangular, twice as long as broad; funicle-joints 1 to 3 together as long as pedicel, each broader than long, slightly widening from 1 to 3; 4, 5, and 6 each longer than preceding joint and slightly widening; club long ovate, flattened, nearly as long as funicle. Head wedge-shaped from side, vertex flattened; facial depression large, triangular, occupying almost entire face; eyes approximate, naked; ocelli small, forming a nearly right-angled triangle; thorax somewhat tectiform, the scuto-scutellar furrow forming the ridge; axillæ meeting at tips; vertex nearly smooth, glistening; mesoscutum faintly shagreened, scutellum very finely and uniformly punctate; axillæ faintly transversely aciculate; abdomen smooth, shining; mesopleura faintly aciculate, shining. Wings moderately broad; marginal vein distinct but short, postmarginal very short, stigmal very faint, almost indistinguishable; wings perfectly hyaline, veins almost colourless except marginal vein, which is heavy and brown; terebra slightly exerted. General colour black, with coppery reflections on mesopleura, faint bluish reflections on mesoscutum, greenish on head; all antennæ and all legs except hind femora honey-yellow; hind femora dark brown; hind coxæ dark at immediate base.

Three females, Balthazar and St. John's River, March 4, 250 feet, shady damp ditch; April 5, 250 feet, open place on bushes at sunset; April 7, 250 feet, herbage near stream.

ENCYRTUS CONFORMIS, sp. n.

♀. Length 1·77 mm.; expanse 3·3 mm. Body stout, thorax very convex; axillæ meeting at tips; scutellum rounded; abdomen cordate, flattened above. Antennæ short, rather stout, inserted just below middle of face; scape short, cylindrical; pedicel and first funicle-joint subequal in length; remaining funicle-joints subequal in length, each about as long as broad, but each somewhat shorter than 1; club oval, slightly flattened, shorter than two preceding funicle-joints together; entire flagellum with short close hairs. Eyes distinct, naked; ocelli forming a very obtuse-angled triangle. Head and face delicately reticulate, with sparse large round punctures at border of eyes and near ocelli; entire mesonotum delicately imbricate-punctate; metanotum not carinate; pleura very faintly longitudinally reticulate,

shining; abdomen smooth, shining. General colour black, with faint metallic reflections; coxæ and base of femora dark brown, rest of legs honey-yellow; tegulæ brown; antennæ honey-yellow, brownish towards tip; wings hyaline, veins very light.

♂. What may be the male of this species differs as follows:—The round punctures at vertex are more numerous; the meso-scutellum is closely and finely punctate; the antennæ about as with *E. convergens*, but dark brown in colour. Eyes sparsely hairy. Colour more metallic than in female.

One female, Balthazar, March 31, 1900 feet, on foliage on ground near water. One male, Mount Gay estate, April 1, swampy forest.

ENCYRTUS CONVEXUS, sp. n.

♂. Length 1.16 mm.; expanse 2.4 mm. Slender, dorsum of thorax strongly rounded in all directions. Antennal scape long, slender, cylindrical; pedicel very short, subglobose; funicle-joints decreasing slightly in length, joint 1 four times as long as broad, subcylindrical, well separated, each with sparse long hairs not arranged in whorls; club not widened, slightly longer than preceding funicle-joint. Eyes naked, distant. Mesonotum short; scutellum rounded; axillæ meeting at tips; abdomen triangular, flattened from above. Head and face finely transversely reticulate; cheeks smooth, shining; mesoscutum finely reticulate; axillæ smooth; mesoscutellum densely and strongly punctate, the impressions becoming lengthened around the border; metanotum smooth, with a complete median carina; mesopleura very delicately longitudinally reticulate. General colour metallic green; pleura and abdomen piceous; antennæ and mouth-parts light brown; all legs, including coxæ, light honey-yellow; wings hyaline, veins brown.

One male, Balthazar, March 31, 1900 feet, on foliage on ground, near water.

ENCYRTUS SORDIDUS, sp. n.

♀. Length 0.86 mm.; expanse 2.7 mm. Body stout, short; thorax well arched; axillæ meeting at tips; abdomen subcircular. Eyes longitudinal, hairy, well separated; ocelli forming a right-angled triangle. Antennæ inserted below middle of face, short, clavate; scape short, slender, cylindrical; pedicel stout, rather more than twice as long as broad; first funicle-joint minute, transverse; remaining funicle-joints increasing in width to 6, which is

rather more than twice as wide as long; club flattened ovate, as long as four preceding funicle-joints together; entire flagellum with close short hairs, slightly appressed; mesoscutum and base of mesoscutellum very faintly reticulate, tip of scutellum perfectly smooth; metanotum not carinate, smooth; mesopleura and abdomen smooth, shining. Marginal vein of fore wings thickened, as long as stigmal, which enters disc of wing at a narrow angle with costa. General colour sordid black, slightly lustrous on scutellum, mesopleura, and abdomen; legs with dark femora and reddish-brown tibiae and tarsi; antennal scape, pedicel, and end of club light brown, rest black; fore wings faintly and nearly uniformly infuscated.

One female, Grand Étang, March 31, 1900 feet, on foliage on ground, near water.

ENCYRTUS ROTUNDIFORMIS, sp. n.

♀. Length 1 mm.; expanse 1.9 mm. Body stout; thorax globular; abdomen subcircular. Scape slender, cylindrical, inserted near mouth and not reaching to middle ocellus; pedicel twice as long as first funicle-joint; funicle-joints increasing gradually in length and width, each about as wide as long; club slightly flattened, long oval, as long as three preceding funicle-joints together. Eyes faintly hairy, moderately distant; ocelli forming a right-angled triangle. Axillae meeting at tips. Marginal vein of fore wings extremely short. Head finely rugose-punctate, becoming aciculate on cheeks; mesoscutum finely imbricate; mesoscutellum closely and deeply longitudinally aciculate; mesopleura nearly smooth, very faintly reticulate; abdomen smooth, shining. Colour: mesoscutum and mesopleura bright golden green; mesoscutellum dull opaque dark green; head dark greenish above, purplish below; abdomen dark, with greenish æneous reflections; all femora black, yellowish at each end; front and middle tibiae and all tarsi light honey-yellow; hind tibiae with basal half black; antennal scape black, light brown at extreme tip; remainder of antennae brown. Wings hyaline, iridescent, veins brown.

Two females, Balthazar, and Mirabeau estate, April 5 and 6, 400 and 250 feet.

ARCHINUS, gen. nov.

Antennae inserted near mouth; scape long, slender, cylindrical; bulla cylindrical, one-fourth as long as scape; pedicel

longer than wide ; funicle-joints all transverse ; club very long, longer than entire funicle, stout, obliquely truncate from tip nearly to base. Eyes naked, approximate ; ocelli forming a very acute-angled triangle. Mesonotum subtectiform ; scutellum triangular ; axillæ very narrow and widely separated at tips. Abdomen short, triangular on longitudinal section ; ovipositor extruded. Fore wings ample, marginal vein extremely short ; stigmal entering disc of wing at an angle of about 40° with costa ; disc closely and finely ciliate, with a narrow oblique hairless streak below stigma.

ARCHINUS OCCUPATUS, sp. n.

♀. Length (less ovipositor) 0.88 mm. ; expanse 1.9 mm. Scape reaching to middle ocellus ; pedicel three times as long as broad and nearly as long as funicle ; club longer than entire funicle and nearly as long as funicle and pedicel together. Head smooth, not highly polished ; mesoscutum very faintly transversely shagreened and with sparse punctures ; hind border of pronotum with several deep round punctures ; mesoscutellum and abdomen smooth, scutellum opaque, abdomen not highly polished. General colour black, more or less shining ; coxæ and femora jet-black, femora whitish at each end ; basal half of front and hind tibiæ black, distal half light yellow ; middle tibiæ with two sharp black bands, one at base and one at middle, elsewhere light yellow, as are also all tarsi ; antennal scape brown, darker above ; pedicel with basal half black, distal half yellowish ; funicle-joints 1, 5 and 6 yellow, 2, 3, and 4 black ; basal joint of club black, remaining joints light yellow-brown ; ovipositor-sheaths black, yellow at tip, ovipositor honey-yellow. Wings hyaline, iridescent, veins brown, marginal darker.

One female, Balthazar, March 2, 250 feet, flying at sunset.

ARATUS, gen. nov.

♂. Head broad ; cheeks prominent, genal sulcus absent ; eyes distant, hairy ; vertex with large round punctures, extended in a single row down inner border of eyes. Mesoscutum rather sparsely punctate ; mesoscutellum smooth ; axillæ meeting at tips. Hind legs unusually stout. Marginal vein of fore wings very short, postmarginal shorter than stigmal. Antennal scape short, cylindrical ; pedicel shorter and narrower than first funicle-joint ; flagellum stout, with very short hairs ; funicle-joints all

nearly as broad as long and subequal in length and breadth; club oval, of same width as funicle-joint 6. Comes nearest to *Bothriothorax*.

♀ unknown.

ARATUS SCUTELLATUS, sp. n.

♂. Length 1.6 mm.; expanse 3.3 mm. Lower face and cheeks smooth, shining, face faintly reticulate; ocelli forming a right-angled triangle; punctation of mesoscutum not dense, impressions longitudinal, each deep anteriorly, becoming more and more shallow posteriorly; axillæ with a few small sparse round punctures; mesoscutellum and abdomen highly polished; mesopleura opaque, metapleura shining, faintly reticulate. Colour black; face with purplish reflections; mesoscutum with faint greenish lustre; mesoscutellum and metapleura æneous; all femora black, brown at tips; front and middle tibiæ light brown; hind tibiæ dark brown, light at tip; antennæ and mouth-parts light brown. Wings hyaline, veins brown, marginal vein darker.

One male, Mount Gay estate, April 1, swampy forest near sea-shore.

Subfamily APHELININÆ.

APHELINUS, *Dalman*.

APHELINUS DIASPIDIS, *Howard*.

Aphelinus diaspidis, *Howard*, *Ann. Rep. U.S. Dept. Agric.* 1880, p. 355. Ft. George, Fla., Santa Barbara, Cal., and Japan.

One female, Balthazar, April 13, 350 feet, in second growth on shores of stream.

ASPIDIOTIPHAGUS, *Howard*.

ASPIDIOTIPHAGUS CITRINUS.

Coccophagus citrinus, *Craw*, *Destructive Insects*, Sacramento, Cal., 1891. San Gabriel, Cal.

Aspidiotiphagus citrinus, *Howard*, *Insect Life*, vi. p. 234 (1891). San Gabriel, Cal.

Aspidiotiphagus citrinus, *Howard*, *Revision of the Aphelininæ of North America*, p. 31 (1895). San Gabriel, Cal., Champaign, Ill., and Portici, Italy.

One female, Balthazar, April 7, 250 feet, swept from herbage near stream.

ABLERUS, *Howard*.

ABLERUS CLISIOCAMPÆ.

Centrodora clisiocampæ, *Ashmead, Proc. Ent. Soc. Wash.* iii. p. 10 (1894). Florida.

Ablerus clisiocampæ, *Howard, Revision of the Aphelininæ of North America*, p. 42 (1895). Dist. of Columbia; Champaign, Ill.

One female, Balthazar, 1900 feet, on foliage on ground.

ABLERUS AUREONOTUS, sp. n.

♀. Length 0·58 mm.; expanse 1·35 mm. Eyes red; pronotum and tip of abdomen black; base of abdomen light yellow; mesonotum golden yellow; legs uniformly dull honey-yellow; wings slightly infuscated, paler at tips; wing-veins dark brown; antennæ (broken except for the scape and 3 pedicel and 3 funicle-joints of the right one) uniformly honey-yellow.

Described from one female in poor condition, Balthazar, 300 feet, shady bank of stream.

Subfamily ELASMINÆ.

ELASMUS, *Westwood*.

ELASMUS SMITHII.

Elasmus Smithii, *Howard, Linn. Journ., Zool.* xxv. pp. 104-5. St. Vincent.

Four females taken in April in the house on windows.

ELASMUS FLAVOSCUTELLATUS, sp. n.

♀. Length 1·7 mm.; expanse 3·5 mm.; greatest width of fore wing 0·39 mm. Comes closest to *E. Smithii*, from which it differs mainly in the possession of a rather broad, semicircular yellow band around the posterior margin of the mesoscutellum. General colour dark metallic green; antennæ dark brown; front femora and tibiæ honey-yellow; front coxæ metallic at base, middle coxæ honey-yellow, hind coxæ metallic except at tip; middle and hind femora metallic above and with a broad median transverse dark band; middle tibiæ honey-yellow; dark lines of hind tibiæ forming four cells, one long and one short, covering the length of the sclerite, and two short ones to the outside; all tarsi black; tegulæ yellow at tip; semicircular band around apical border of mesoscutellum and all of mesopostscutellum yellow; abdomen dark above and yellowish below, the dark upper colour having a tendency towards extending down on the

sides in bands; tip of pygidium and terebra black. Abdomen longer than thorax; closed wings reaching exactly to tip of abdomen.

Described from two females swept from herbage April 3, at an elevation of 250 feet.

ELASMUS CELLULATUS, sp. n.

♂. Length 1.4 mm.; expanse 3 mm.; greatest width of fore wing 0.36 mm. Head with close, rather small thimble-like punctures. General colour dark metallic blue-green; antennæ light brown; tip of all coxæ, all of front and middle tibiæ, base and tip of middle and hind femora pallid; all tarsi dark; tegulæ metallic; no trace of yellow on scutellum or postscutellum; dark lines of hind tibiæ arranged in two longitudinal rows of interfitting cells, three and a half cells to each row. Abdomen shorter than thorax; closed wings extending considerably beyond tip.

Described from one male taken on stones of stream April 13, at 350 feet elevation.

ELASMUS LEVIFRONS.

Elasmus levifrons, *Howard, Linn. Journ., Zool.* xxv. pp. 101-102. St. Vincent.

One female, April 3, Balthazar, 250 feet, swept from herbage.

Subfamily ELACHISTINÆ.

EUPLECTRUS, *Westwood*.

EUPLECTRUS FURNIUS.

Euplectrus furnius, *Walker, Ann. Mag. Nat. Hist.* ser. 1, xii. p. 48 (=bicolor, *Swed.*). St. Vincent.

Euplectrus furnius, *Howard, Linn. Journ., Zool.* xxv. p. 105. St. Vincent.

Eleven males and females, Balthazar, Chantilly estate, and Grand Étang (windward side), and Mount Gay estate and St. George's (leeward side), captured under varying conditions. The species is probably parasitic upon noctuid larvæ.

HOPLOCREPIS, *Ashmead*.

HOPLOCREPIS GRENADENSIS, sp. n.

♀. Resembles the type-specimen of this hitherto monotypical genus except in the following particulars:—The thorax instead

of being pale brownish yellow is a rather dark brown, and the abdomen is nearly black. The petiole instead of being white is brown. The wing maculation is as follows:—At proximal third of fore wing a narrow band arises from within the bunch of bristles and extends transversely to hind border, gradually widening; distad of this brown band is a hyaline band of about the same width, but wider at costa and narrower at hind border, instead of the reverse; beyond this the wing is brown to apex except for two roundish hyaline patches, one on costal margin just before apex and the other in a corresponding position on hind margin.

Described from one female, from which unfortunately the head is absent. Mount Gay estate (leeward side), swept from herbage near a stream.

PACHYSCAPHA, gen. nov.

♂. Scape of antenna inserted near the mouth by a short slender stalk and almost immediately widening enormously in a dorso-ventral direction, becoming nearly as wide as long, and presenting when seen from side the outline of a rounded triangle with its apex at pedicel; its inner surface is concave and its outer convex; pedicel short, triangular, twice as long as wide; funicle-joints subequal in length, each about as long as pedicel, moniliform; club long ovate, slightly wider than last funicle-joint but nearly twice as long. Face concave, occipital margin and pronotum faintly emarginate; scutellum without furrows. Abdomen with a distinct but short petiole. Posterior tibiæ with two long spurs, as with *Euplectrus*, with which it agrees in other respects.

PACHYSCAPHA INSULARIS, sp. n.

♂. Length 1.6 mm.; expanse 2.9 mm. Head and thorax with sparse long white bristles; mesoscutum with a rather coarse but shallow and irregular favose sculpture; mesoscutellum delicately longitudinally shagreened; pleura faintly granulate. General colour black, shining; antennal bulla, pedicel, and first funicle-joint and petioles of other joints, tegulæ, all legs including coxæ, and a broad triangular basal abdominal spot, honey-yellow; wings perfectly hyaline, veins slightly yellowish.

Described from six specimens, Balthazar, Mount Gay estate, and St. John's River—two in a cocoa orchard, two on foliage in second-growth woods, one in house on window, and one swept from herbage in open weedy spot.

MIOTROPIS, *Thomson*.

MIOTROPIS NIGRICANS.

Miotropis nigricans, *Howard, Linn. Journ., Zool.* xxv. p. 106. St. Vincent.

Five females, one March 23, 500 feet, and the others April 3, 250 feet, open sandy places, swept from herbage.

MIOTROPIS GIBBOSUS, sp. n.

♀. Length 2.2 mm.; expanse 3.5 mm. Flagellum of antennæ moderately long, not condensed as with preceding species; funicle-joints a little longer than broad, well separated, club as long as last funicle-joint; eyes hairy, widely separated; ocelli in a curved line; mesonotum finely rugulose; scutellum smooth at sides; abdomen rather coarsely reticulate. General colour black; face, including cheeks, antennal scape, sides of pronotum, attenuated portion of collar, basal joint of abdomen, and all legs except hind coxæ, dark honey-yellow; wings hyaline, except for small dusky patch below and including stigmal vein.

One female specimen, Mount Gay estate, April 6, 400 feet, on high growth of weeds in young nutmeg orchard.

STENOMESIUS, *Westwood*.

STENOMESIUS HISTRIONICUS, sp. n.

♂. Length 2.1 mm.; expanse 3.3 mm. Antennæ with flagellar joints subequal in length, well separated, flattened, with dense short pile. Head and thorax nearly smooth, faintly shagreened; abdomen smooth, shining; median furrow of metanotum complete, sharp, slightly emarginate. Colour black; head honey-yellow, except occiput and eyes and closely placed reddish ocelli; mesoscutellum, parapsides of mesoscutum, and hind border of pronotum honey-yellow; dorsum of abdomen with pallid central basal spot, as with many species of *Elachistus*; basal portion of underside of abdomen also pallid; front coxæ yellow-brown, middle and hind coxæ dark above, all femora pale yellowish; hind tibiæ black except at base, middle and front tibiæ yellowish; wings hyaline.

One male specimen, April 1, Granville (windward side), sea-level, below somewhat swampy thicket by stream.

STENOMESIUS GRENADENSIS, sp. n.

♀. Antennæ with funicle-joints subequal in length, increasing slightly in width; pedicel smaller and narrower than funicle-joint 1; club slightly broader and longer than funicle-joint 4, ovate-acuminate; mesoscutum transversely aciculate, mesoscutellum smooth and shining; eyes widely separated, naked; ocelli forming a nearly right-angled triangle. General colour honey-yellow; metanotum black; wings hyaline; hairs on thorax dark.

One female specimen, Balthazar (windward side), March 31, 1900 feet, on foliage on ground, damp spot. The abdomen of the single specimen has been lost, but the form is characteristically marked.

ELACHISTUS, *Spinola*.

ELACHISTUS METALLICUS, sp. n.

♀. Length 1.5 mm.; expanse 2.8 mm. Facial depression broad, shallow, acute at apex; antennæ inserted below middle of face; scape short, not reaching middle ocellus; flagellum short, submoniliform; club ovate, longer than preceding funicle-joint. Head smooth, shining, with a few very faint punctures towards vertex; pronotum and mesoscutum transversely rugose, with long whitish hairs; mesoscutellum faintly reticulate, shining, with no trace of median furrow; abdomen smooth, shining; metanotum smooth, its median groove widening anteriorly. General colour metallic blue-green; antennæ dark honey-yellow; legs including coxæ light honey-yellow; abdomen with second joint honey-yellow above and with a large yellowish spot below; wings hyaline, stigmal vein slender.

One female specimen, Balthazar, March 31, 1900 feet, on foliage near ground.

ELACHISTUS SCUTELLATUS.

Elachistus scutellatus, *Howard, Linn. Journ., Zool.* xxv. pp. 107-108. St. Vincent.

Two males, one St. George's, March 2, 250 feet; and one Mount Gay estate, April 1, 250 feet, taken in house on window.

ARDALUS, gen. nov.

♀. Abdomen with a short but distinct petiole; scutellum with two longitudinal sutures; posterior tibiæ with two moderate

spurs, one longer than the other; eyes hairy; antennæ inserted below middle of face, scape short; pedicel short; four well separated funicle-joints, club ovate; occipital angle sharp; pronotum subconical; parapsidal sutures complete but delicate; axillæ strong; postmarginal vein much longer than stigmal, marginal still longer.

In this genus may be placed *Diglyphus? albipes*, Ashm., and *Diglyphus? maculipennis*, Ashm. (Linn. Journ., Zool. xxv. p. 167), described from St. Vincent.

ARDALUS ACICULATUS, sp. n.

♀. Length 1.5 mm.; expanse 3.0 mm. Head smooth, shining, with small sparse round punctures; funicle-joints of antennæ flattened, subquadrate, each one half longer than broad, pubescent; pronotum and mesoscutum finely rugose; mesoscutellum and axillæ longitudinally aciculate; mesoscutellar sutures sharp, punctate at bottom, parallel; metanotal suture complete, emarginate; abdomen smooth, shining. General colour black; eyes reddish and ocelli bright red; scape, tegulæ, all legs except hind coxæ, base of abdomen above, and more than half of venter honey-yellow; wings hyaline.

Four female specimens, St. John's River, March 15, 250 feet, came to light at night, March 30; Mount Gay estate, April 1; Balthazar, April 7.

ARDALUS POLITUS, sp. n.

♀. Length 1.8 mm.; expanse 2.7 mm. Head and face shagreened, and with many rather large roundish punctures; first and second funicle-joints of antennæ long ellipsoidal, more than twice as long as broad, subequal, 3 and 4 considerably shorter and somewhat broader, cup-shaped, very faintly pubescent; pronotum and mesoscutum strongly shagreened; mesoscutellum and axillæ smooth; mesoscutellar sutures converging slightly towards head, with a row of punctures at proximal border; metanotum with central longitudinal carina; abdomen smooth, shining. General colour greenish æneous; all legs, including coxæ, pallid; scape pallid, flagellum light brown; wings with an irregular, somewhat circular discal fuscous patch.

One female, Balthazar, April 7, 250 feet, open weedy spot near stream.

ARDALUS LEVIGATUS, sp. n.

♀. Length 1.3 mm.; expanse 1.75 mm. Head and face smooth, shining; mesonotum very faintly reticulate, appearing smooth and shining with a hand-lens; scutellar sutures converging somewhat towards head, punctate on inner border. Abdomen elongate ovate, longer than thorax, pointed, smooth and shining; segments 1 and 6 longest, 2, 3, 4, and 5 subequal, 2 a trifle the longest. Antennæ short; funicle-joints and club somewhat flattened, hairy; funicle-joints gradually shorter from 1 to 4, 4 as long as wide; club a little longer than two preceding funicle-joints together. Colour black, shining; antennal scape and all tibiæ and tarsi, and venter of abdomen at base light brown; femora and tips of coxæ darker, trochanters concolorous with tibiæ; fore wings with a distinct dark brown patch arising at stigmal vein and extending halfway across wing; veins dark brown.

One female, Mount Gay estate, April, 250 feet, in house on window.

Subfamily EULOPHINÆ.

EULOPHUS, *Geoffroy*.

EULOPHUS AURIPUNCTATUS.

Eulophus auripunctatus, *Ashmead*, *Linn. Journ., Zool.* xxv. p. 166, ♀. St. Vincent.

One female, Balthazar, March 31, 1900 feet, on foliage near the ground, damp spot. It is unfortunate that we do not know the male of this very beautiful Eulophine, as it may prove the species to be distinct from *Eulophus*.

PARAOLINX, *Ashmead*.

PARAOLINX LINEATIFRONS.

Paraolinx lineatifrons, *Ashmead*, *Linn. Journ., Zool.* xxv. p. 166, ♂ ♀. St. Vincent.

Four males, Balthazar, March 2, 250 feet, and March 31, 1900 feet, herbage.

SYMPIESIS, *Foerster*.

SYMPIESIS GRENADENSIS, sp. n.

♀. Length 1.5 mm.; expanse 2.9 mm. Antennæ rather short, scape very slender; funicle-joints cylindrical, three times as long as wide, clothed with short erect hairs. Ocelli at angles of a

right-angled triangle; head smooth in ocellar space, faintly shagreened elsewhere; mesonotum closely and finely punctate; metanotum still more finely and somewhat longitudinally punctate, central longitudinal carina complete and distinct; abdomen broad oval, as wide as thorax and nearly as long. General colour bright golden green; head steel-blue above, with æneous reflections on face below; abdomen greenish at base, darker, with æneous reflections towards tip; pleura and coxæ purplish; all legs and antennal scape pallid, flagellum black; wings hyaline, veins light brown.

♂. Resembles the female in all details as above, except that abdomen is slender and nearly parallel-sided.

Three females, one male, Mirabeau estate, Balthazar, St. John's Bay, and Chantilly estate, March 25 to April 1, 250 feet, damp places.

SYMPIESIS POLITUS, sp. n.

♀. Closely related to the preceding species, from which it differs only in the following particulars. Mesonotum instead of being closely and finely punctate is smooth, polished, with very faint shagreening. Antennal scape black; funicle-joints shorter in proportion to their length, not quite twice as long as wide. Abdomen long oval, a trifle longer than thorax, sides slightly flattened, subparallel in middle.

One female, Balthazar, April 3, 250 feet, open weedy spot, swept from herbage.

NECREMNUS, *Thomson*.

NECREMNUS PURPUREUS, sp. n.

♀. Length 0.84 mm.; expanse 1.63 mm. Antennæ short, rather closely set with moderately long hairs. Body stout; abdomen short oval, a trifle wider than thorax and also a little shorter; ovipositor slightly extruded. Head and mesonotum with close fine round punctures; mesoscutellum with fine, shallow, somewhat elongate punctation; abdomen smooth. Wings reaching slightly beyond tip of abdomen, strongly ciliate, distal border narrowly brown; disc below and including stigmal vein with a brown transverse band darkest towards costa. General colour dark metallic purple, with green reflections on scutellum; legs pallid, middle and hind femora brownish at middle;

ovipositor light brown; antennæ black, last funicle-joint white, club brown.

One female, Balthazar, April 2, on trailing plant on sea-shore. Probably parasitic on some lepidopterous leaf-miner.

Subfamily ENTEDONINÆ.

OMPHALE, *Haliday*.

OMPHALE VARICOLOR.

Omphale varicolor, *Ashmead, Linn. Journ., Zool.* xxv. p. 168. St. Vincent.

Eighteen males and females, Mirabeau, Chantilly, and Mount Gay estates, Balthazar, and St. George's, March 1 to April 7, 250 to 400 feet, at light at night, in house on window, and swept from herbage under varying conditions.

OMPHALE STRIATA, sp. n.

♀. Length 2·3 mm.; expanse 3·5 mm. Antennæ as with preceding species; mesonotum closely and finely punctate; metanotum smooth; abdomen finely shagreened; face faintly shagreened, with many short white bristles below; facial depression strong, antennal carina distinct, genal sulcus indicated faintly at border of eye; occiput delicately transversely aciculate. Colour metallic blue-green, the green predominating on dorsum of thorax and basal segments of abdomen, the blue on head, underside of body, and terminal three-fourths of abdomen; disc of mesoscutum with light green longitudinal stripe down centre bordered on each side by a darker and broader stripe, lighter again beyond; faint indication of similar marking on mesoscutellum; parapsides of mesoscutum also faintly striped in the same way; scape of antennæ brown; tips of tibiæ and all tarsi, except terminal joints, yellowish white; wings hyaline, veins nearly white.

♂. Extremely variable in size and colour. The stripe on mesoscutellum more pronounced than in female; hairs on flagellar joints very long, those on first funicle-joint nearly one-third the length of entire flagellum. Genal sulcus distinct, complete.

Described from seventeen male and female specimens, Mirabeau, Chantilly, and Lake Antoine estates, Balthazar, Grand Étang, March 2 to April 7, 250 feet, taken under varying conditions.

HOLCOPELTE, *Foerster*.

HOLCOPELTE NIGROCYANEUS.

• Holcopelte nigrocyaneus, *Ashmead, Linn. Journ., Zool.* xxv. p. 171. St. Vincent.

Eleven males and females, Chantilly, Mirabeau, and Mount Gay estates, Balthazar, under varying conditions.

HOLCOPELTE METALLICUS.

Holcopelte metallicus, *Ashmead, Linn. Journ., Zool.* xxv. pp. 170-171. St. Vincent.

Eight male and female specimens, Mount Gay, Chantilly and Mirabeau estates, Balthazar, under varying conditions.

HOLCOPELTE NIGROÆNEUS.

Holcopelte nigroæneus, *Ashmead, Linn. Journ., Zool.* xxy. p. 172. St. Vincent.

Seven male and female specimens, Mirabeau and Mount Gay estates, St. John's River and Balthazar, under varying conditions.

HOLCOPELTE CUPREUS.

Holcopelte cupreus, *Ashmead, Linn. Journ., Zool.* xxv. pp. 171-172. St. Vincent.

Four females, one male, Mount Gay estate, Balthazar, and St. John's River, March 4 to April 10, 250 feet, came to light, taken in house on window, swept.

DEROSTENUS, *Westwood*.

DEROSTENUS ROTUNDUS.

Derostenus rotundus, *Ashmead, Linn. Journ., Zool.* xxv. p. 174. St. Vincent.

Eight male and female specimens, Mirabeau and Mount Gay estates, Balzathar, under varying conditions.

DEROSTENUS VIOLACEUS, sp. n.*

♀. Length 1.0 mm.; expanse 1.95 mm. Head faintly shagreened; pro- and mesonotum rather strongly shagreeno-punctate; first funicle-joint of antennæ as long as pedicel, joint 2 shorter than 1, joint 3 as long as 1 and broader, 4 equal to 3; club flattened, ovate, nearly as long as two preceding joints together; wings hyaline. Colour dark violaceous; antennæ, all tibiæ and tarsi, and middle femora light honey-yellow; front and hind femora brown above and in middle, yellowish at each end.

* This species belongs to the genus *Closterocerus*.—L. O. H.

Described from one female, Balthazar, March 31, 1900 feet, on foliage on ground.

ASTICHUS, Foerster.

ASTICHUS CILIATUS, sp. n.

♂. Length 0·81 mm.; expanse 1·6 mm. Scape inserted slightly below middle of face, reaching to tip of head; pedicel short, triangular; first and second funicle-joints subequal in length and only slightly separated by a petiole; second and third and third and fourth widely separated by a long petiole, the body of each joint crowned by four long hairs; club long ovate, with many long hairs. Head and face very delicately punctate, pro- and mesonotum rather more coarsely and very closely punctate; abdomen smooth; postmarginal and stigmal veins subequal in length, margin of fore wings uniformly furnished with rather long cilia. Colour metallic green, with æneous reflections on head and mesoscutum, and cupreous reflections on mesoscutellum; scape dark brownish; front legs yellowish white, middle and hind femora black at base, trochanters yellow, hind tibiæ black at extreme tip; front and middle tarsi cannot be seen, but hind tarsi have joint 1 white, joints 2 and 3 black, and joint 4 white. Front wings with three irregular dusky patches, one arising at middle of marginal vein and extending in the shape of an irregular band across the wing; the second arises at stigma and extends half way across; the third is a somewhat wedge-shaped spot at apex, the base of the wedge on the border of the wing; veins nearly white except for three black patches, one at base of marginal vein, one at middle of marginal vein, and one at tip of marginal vein, including stigmal.

Described from one male specimen, Grand Étang, 1900 feet, on foliage on ground.

CHRYSOCHARIS, Foerster.

CHRYSOCHARIS LIVIDICEPS.

Chrysocharis lividiceps, *Ashmead, Linn. Journ., Zool.* xxv. p. 176. St. Vincent.

One female, Mirabeau estate, 400 feet, brushed from herbage about cocoa orchard.

CHRYSOCHARIS FULGENS, sp. n.

♀. Length 1·16 mm.; expanse 1·95 mm. Head (badly

shrivelled) faintly punctate; eyes distinct, naked; mesonotum delicately shagreened; abdomen longer than thorax, ovate, strongly concave above, smooth, shining; bristles of mesonotum white, sparse and long. Colour of head and abdomen metallic blue-green with purplish reflections; thorax brilliant æneous; antennæ dark brown, all legs except coxæ pallid; wings perfectly hyaline, veins light green.

Described from one female, Balthazar, April 3, 250 feet, swept.

ENTEDON, *Dalman*.

ENTEDON PULCHER, sp. n.

♀. Length 1.16 mm.; expanse 1.8 mm. Antennæ inserted between mouth and middle of face; scape short, not reaching to top of head; flagellum about as long as scape, joints short, condensed; club as long as funicle, prolonged into a stylus; head (greatly shrivelled) and mesonotum finely and closely punctate; abdomen faintly shagreened. Antennæ black, except club which is brown; head, mesoscutar parapsides, metanotum, abdomen and entire underside of body dark metallic blue or purpureous; disc of mesoscutum brilliant æneous; scutellum brilliant cupreous; wings hyaline, with a narrow curved fuscous band below stigma, concave distally; distal tip of wing also narrowly fuscous; veins dark brown, stigma darker; legs black except at joints, tarsi nearly white.

One female specimen, Balthazar, April 9, sea-shore, on trailing plant.

Subfamily TETRASTICHINÆ.

TETRASTICHUS, *Haliday*.

Table of Grenada Species.

Females.

Abdomen ovate, nearly circular on cross-section,
a trifle longer than thorax.

Mesoscutum with several rows of impressed dots
on medial side of parapsidal grooves. *cupreus*, Ashm.

Mesoscutum without such impressed dots.

Scutellum without a median furrow. *cuproideus*, sp. n.

Scutellum with a median furrow *sulcatus*, sp. n.

Abdomen oval, flattened above, as wide as thorax,
and not at all or but slightly longer.

Antennæ very long *longicornis*, Ashm.

Antennæ not especially long.

Cheeks strongly developed and, with lower face, yellow *ashmeadi*, sp. n.

Cheeks not especially developed, dark.

Thorax closely punctate, colour greenish *viridescens*, sp. n.

Thorax finely aciculate, black *similis*, sp. n.

Thorax faintly aciculate, greenish *circularis*, sp. n.

Thorax smooth, shining *micans*, sp. n.

Abdomen elongate, pointed, usually narrower than thorax and always considerably longer.

Yellow; abdomen with dark transverse bands *fasciatus*, Ashm.

Body dark, base of abdomen only light *basilaris*, Ashm.

Bright metallic green; coxæ light yellow *coxalis*, sp. n.

Black or faintly metallic; scutellum elevated into a rounded prominence *elevatus*, sp. n.

Black; scutellum for the most part in plane of scutum; scutum with impressed dots bordering inner edge of parapsidal furrow *vulgaris*, Ashm.

Black, without impressed dots; hind wings acutely pointed at tip *acutipennis*, Ashm.

TETRASTICHUS BASILARIS.

Tetrastichus basilaris, *Ashmead, Linn. Journ., Zool.* xxv. p. 186. St. Vincent.

One male, Chantilly estate, March 7, 300 feet, by shady pool in cocoa orchard.

TETRASTICHUS CUPREUS.

Tetrastichus cupreus, *Ashmead, Linn. Journ., Zool.* xxv. pp. 184-185. St. Vincent.

Sixteen male and female specimens, Mount Gay and Mirabeau estates, Grand Étang, St. George's, and Balthazar, March 7 to April 15, 300 to 1900 feet, under varying conditions.

TETRASTICHUS FASCIATUS.

Tetrastichus fasciatus, *Ashmead, Linn. Journ., Zool.* xxv. p. 187. St. Vincent.

Eleven male and female specimens, Mount Gay estate, Balthazar, March 31 to April 15, 300 to 1900 feet, under varying conditions.

TETRASTICHUS ELEVATUS, sp. n.

♀. Length 1.28 mm.; expause 2.0 mm. Antennæ short, scape not reaching to top of head, pedicel longer than first funicle-joint; funicle-joints 1, 2, and 3 subequal in length,

flattened, a little longer than broad; club long ovate, as long as two preceding funicle-joints together; thorax short, compact; scutellum elevated; abdomen longer than head and thorax together, sides subparallel, pointed at tip; head and mesonotum nearly smooth, shining, very faintly longitudinally shagreened; abdomen smooth. Colour black; antennæ including scape dark brown, tegulæ dark brown, all femora blackish above, tibiæ and tarsi honey-yellow; wings hyaline, disc closely pubescent, veins dark brown.

Described from one female specimen, Grand Étang, March 7, 1900 feet, bank of shady stream.

TETRASTICHUS COXALIS, sp. n.

♀. Length 1.3 mm.; expanse 2.1 mm. Antennæ as with preceding species; sculpture as with preceding species, except that there are two faint punctures halfway between median suture and parapsidal groove of mesoscutum; shape and proportion of abdomen as with preceding species; central furrow of mesoscutum very faint, making the form intermediate between *Tetrastichus* and *Tetrastichodes*. General colour metallic green, head and abdomen only slightly metallic; antennæ dark brown; all legs, including front and middle coxæ, honey-yellow, hind coxæ lighter, metallic at tip; wings hyaline, wing-veins uncoloured.

One female, Mount Gay estate, April 6, 250 feet, by road in dry second-growth woods.

TETRASTICHUS MICANS, sp. n.

♀. Length 0.93 mm.; expanse 2.0 mm. Antennæ moderate; scape not reaching to top of head; first funicle-joint as long as pedicel, second and third funicle-joints subequal, not flattened; club elongate, pointed, not widened, as long as two preceding funicle-joints together; thorax and abdomen smooth, shining; central suture of mesoscutum delicate but complete; abdomen shorter than thorax, ovate; wings subhyaline, very slightly dusky. Colour black but highly glistening, very faintly metallic; antennæ, tegulæ, and all legs honey-yellow; front coxæ slightly darker near base.

One female, Balthazar, April 13, 350 feet, on shore of stream.

TETRASTICHUS ASHMEADI, sp. n.

♀. Length 1.16 mm.; expanse 2.4 mm. Antennæ long, scape reaching to top of head; funicle-joints somewhat flattened, joint 1

twice as long as pedicel, joint 2 equal to 1, 3 shorter; club a little shorter than last two funicle-joints together; abdomen about as long as thorax, short ovate; mesoscutar furrow faint; mesonotum very faintly aciculate; abdomen smooth; wings perfectly hyaline, veins light brown. General colour black; antennæ dark brown; face, especially below, tegulæ, postscutellum, base of abdomen above, and all legs including coxæ, honey-yellow.

Six females, Balthazar, March 31 to April 15, all but one at 1900 feet, on foliage on ground; remaining one at 300 feet on shady bank of stream.

TETRASTICHUS SIMILIS, sp. n.

♀. Length 1.35 mm.; expanse 2.9 mm. Antennæ moderate, scape reaching above top of head; funicle-joints subequal in length and width, not flattened, each somewhat longer than pedicel; club not widened, as long as two preceding funicle-joints together; head and mesonotum faintly shagreened; abdomen short, rotund, shorter than thorax; wings very faintly dusky, veins brown. General colour black, faintly glistening; flagellum of antennæ dark brown, pedicel and scape honey-yellow, tegulæ dark brown; all legs honey-yellow, except coxæ which are black.

One female, Grand Étang, 1900 feet, March 31, on foliage on ground.

TETRASTICHUS LONGICORNIS.

Tetrastichus longicornis, *Ashmead, Linn. Journ., Zool.* xxv. p. 185. St. Vincent.

Three females, Mirabeau estate, April 5, 400 feet, about cocoa orchard; Chantilly estate, April 6, 400 feet, weeds about nutmeg orchard; Balthazar, April 13, 350 feet, second growth on shore of stream.

TETRASTICHUS VULGARIS.

Tetrastichus vulgaris, *Ashmead, Linn. Journ., Zool.* xxv. p. 185. St. Vincent.

Five females, Mirabeau estate, April 5, 400 feet, cocoa orchard; Chantilly estate, April 6, 400 feet, nutmeg orchard; Balthazar, April 3 and 7, 250 feet, open weedy places; Mount Gay estate, April 6, 250 feet, in house on window.

TETRASTICHUS CUPROIDEUS, sp. n.

♂. Length 1.98 mm.; expanse 3.5 mm. Antennæ nearly as

long as entire body; head finely shagreened, with a row of large punctures at fore border of eyes; pronotum transversely shagreened, with a row of large impressions at posterior border; mesoscutum longitudinally shagreened, without marginal impressions as with *T. cupreus*; mesoscutellum also longitudinally shagreened; metanotum closely, rather finely punctured, with pronounced longitudinal median carina; abdomen shining, with very faint shagreening; pro-, meso-, and metapleura closely and rather finely punctate; hind coxæ also punctate on outer surface and with two slight longitudinal carinæ. Colour bright metallic green; abdomen darker, yellowish above and below at base; all legs honey-yellow, except coxæ and base of hind femora which are dark and more or less metallic; scape of antennæ honey-yellow, with a black or brown stripe below; flagellum brownish with dark hairs; wings hyaline, veins light brown.

One male, Balthazar, April 15, 250 feet, shady place near stream.

TETRASTICHUS ACUTIPENNIS.

Tetrastichus acutipennis, *Ashmead, Linn. Journ., Zool.* xxv. p. 186. St. Vincent.

One female, Mount Gay estate, April 3, 250 feet.

TETRASTICHUS VIRIDESCENS, sp. n.

♀. Length 1.58 mm.; expanse 2.9 mm. Body stout, compact; pronotum and metanotum scarcely visible; metascutellum nearly smooth, very short, with faint median carina; abdomen rather coarsely shagreened; pleural sclerites delicately punctured; hind coxæ punctured above but not carinate; antennæ short, scarcely reaching to top of head; flagellum scarcely longer than face; facial depression large; head and thorax very closely and rather finely punctate; mesoscutum with marginal row of large, close-set punctures. Colour dark with metallic green reflections, on abdomen blue-green; pedicel, underside of scape, tegulæ, all tibiæ and tarsi honey-yellow; all coxæ metallic, all femora black or slightly metallic; wings hyaline, wing-veins very light.

One female, Balthazar, April 13, 350 feet, second growth on shore of stream.

TETRASTICHUS SULCATUS, sp. n.

♀. Length 1.7 mm.; expanse 3.2 mm. Body stout; abdomen a trifle longer than thorax, ovate, pointed, circular on cross

section; segments 2 to 4 subequal in length, 5 a little longer; antennæ moderately long; funicle-joints subequal in length, each a little wider than long; club longer than two preceding funicle-joints together. Head and disc of mesoscutum closely and faintly aciculate-punctate, parapsides reticulate; mesoscutar furrow wanting on cephalic half of the sclerite; scutellum striate, with a central longitudinal furrow in addition to the two lateral furrows; pleura and outer side of coxæ closely and faintly punctate; abdomen finely reticulate. General colour dark metallic blue; abdomen blue at base, brownish towards tip; all trochanters, tibiæ and tarsi, as well as scape and pedicel, pallid; proximal half or two-thirds of all femora dark brown; funicle and club of antennæ dark brown; wings hyaline, veins light brown.

One female, Balthazar, March 31, 1900 feet; on foliage near the ground, damp spot near water.

TETRASTICHUS CIRCULARIS, sp. n.

♀. Length 1.0 mm.; expanse 2.1 mm. Body stout, compact; abdomen flattened, almost perfectly circular from above, slightly wider than thorax but not so long; segment 2 longest, 3 and 4 subequal. Head and mesonotum faintly aciculate-punctate; median furrow of mesoscutum faint; pleura and hind coxæ reticulate, reticulations becoming lengthened on the mesopleura; funicle-joints of antennæ somewhat flattened, hairy, subequal in length and breadth, each one-half longer than broad; club ovate, flattened, wider than funicle and nearly as long as two preceding funicle-joints. General colour black, shining, with faint metallic reflections; antennæ including scape black; tibiæ and tips of femora honey-yellow; tarsi brown, gradually becoming more intense from joint 1 to joint 4; trochanters light; femora except tips dark brown.

One female, Balthazar, April 6, 250 feet, dry second-growth woods, on foliage.

TETRASTICHUS (?) *FUSCIPENNIS*, sp. n.

♂. Length 1.2 mm.; expanse 2.2 mm. Body rather slender; abdomen ovate, flattened from above, subpetiolate; segment 2 longest, 3, 4, and 5 subequal. Head and thorax nearly smooth, shining, very faintly reticulate; metanotum finely rugose, with divided central carina, lateral spaces divided obliquely by slight carinæ; abdomen smooth and shining; antennæ hairy, sub-

clavate; scape nearly as hairy as flagellum; pedicel long, slender, three times as long as first funicle-joint; funicle-joints subequal in length, increasing slightly in breadth; club ovate, wider than terminal funicle-joint and nearly as long as two preceding funicle-joints together; thorax with sparse stiff black bristles. General colour black, shining; thorax above dark brown; pronotum darkest, meta-notum lightest; petiole light brown; all legs including coxæ pallid, femora and tibiæ a little darker in the middle; scape and pedicel pallid; funicle-joints darker, club lighter; fore wings dusky, especially towards centre.

One male, Balthazar, March 5, 250 feet. Probably generically separated from *Tetrastichus*, but in the absence of the female it is thought best not to erect a new genus.

GYROLASIA, *Foerster*.

GYROLASIA CILIATA.

Gyrolasia ciliata, *Ashmead, Linn. Journ., Zool.* xxv. p. 180. St. Vincent.

Three females, Balthazar, March 31, April 15, two at 300 feet and one at 1900 feet.

GYROLASIA METALLICA.

Gyrolasia metallica, *Ashmead, Linn. Journ., Zool.* xxv. p. 181. St. Vincent.

One female, Mirabeau estate, April 5, 400 feet, from herbage about cocoa orchard.

GYROLASIA BICOLOR.

Gyrolasia bicolor, *Ashmead, Linn. Journ., Zool.* xxv. p. 180. St. Vincent.

Numerous male and female specimens, Chantilly estate, and Balthazar, March and April, under varying conditions.

GYROLASIA FLAVA, sp. n.

♀. Length 9·5 mm.; expanse 1·7 mm. Scape slender, pedicel very short; funicle-joint 1 three times as long as pedicel, joints 2 and 3 subequal to 1; club attenuate; thorax faintly shagreened; abdomen long, pointed, as long as head and thorax together. General colour bright yellow; funicle-joints 1, 3, and club black; the six principal piliferous spots also black (four on mesoscutum and two on scutellum); abdomen dark yellow, segments with brown borders, pygidium black; all legs honey-yellow; wing-veins dark brown; eyes dark red.

One female, Balthazar, June 11, 250 feet, flying at sunset after heavy rain.

TETRASTICHODES, *Ashmead*.

TETRASTICHODES COMPACTUS, sp. n.

♀. Length 1·9 mm.; expanse 2·8 mm. Body stout, compact; abdomen full, round, large, as broad as thorax, long ovate, as long as head and thorax together; antennæ short, scape slender, pedicel shorter than first funicle-joint; funicle-joint 2 shorter than 1, 3 equal to 2; club ovate, widest at base, as long as two preceding funicle-joints together. Facial depression triangular, sides broadly rounded, its upper margin immediately in front of middle ocellus, and nearer to this than ocellus is to occipital margin; head closely and finely punctate, without larger punctures; pronotum, except for smooth hind border, all of mesonotum, pleura, and hind coxæ closely and finely punctate; abdomen strongly shagreened; punctation of mesoscutellum sub-longitudinal, converging slightly towards centre, and forming a spurious median longitudinal groove, apparent in some lights and not perceptible in others; metanotum with close round punctures, the disc forming a triangle by means of two carinæ converging towards apex, divided by a well-marked central longitudinal carina. Colour metallic green; tegulæ black; scape and pedicel of antennæ, and all tibiæ and tarsi honey-yellow; funicle and club dark brown; all femora black, somewhat metallic on middle, honey-yellow at each extremity; coxæ metallic, trochanters honey-yellow; wings hyaline, veins light brown.

♂. Length 1·5 mm.; expanse 2·5 mm. Antennæ long; funicle-joints subequal in length, each nearly twice as long as pedicel; coloration and punctation as with female, except that disc of metanotum is more rugoso-punctate, and the central carina almost immediately divides.

Described from seven females and two males, Mirabeau and Mount Gay estates, and Balthazar, March 31 to April 7, under varying conditions.

TETRASTICHODES COXALIS, sp. n.

♀. Length 1·28 mm.; expanse 2·2 mm. Stout-bodied; abdomen full, rounded, very slightly flattened dorso-ventrally, nearly as long as head and thorax together; antennæ short, flagellum flattened from side, pedicel nearly as long as first funicle-joint;

first and second funicle-joints subequal in length and width, third shorter and wider; club ovate, about as long as two preceding funicle-joints; head and mesonotum closely and finely shagreened; the spurious central carina of scutellum lacking; metanotum with a short, distinct, median longitudinal carina, the spaces on either side pentagonal in shape; all pleura and hind coxæ closely and finely punctate, except for a smooth strip at hind border of mesepimeron. Colour black, shining, very slightly metallic; antennal scape at tip, with all of pedicel, all tibiæ, hind coxæ, all trochanters, and hinder portion of metanotum honey-yellow; wings hyaline, veins dark brown.

One female, Balthazar, March 5, 250 feet, at sunset in cocoa orchard.

TETRASTICHODES CUPREUS.

Tetrastichodes cupreus, *Ashmead, Linn. Journ., Zool.* xxv. p. 182, ♂ ♀. St. Vincent.

Two males, Mirabeau estate, March 25, 500 feet, on herbage near stream.

TETRASTICHODES FEMORATUS.

Tetrastichodes femoratus, *Ashmead, Linn. Journ., Zool.* xxv. p. 183, ♂ ♀. St. Vincent.

Two females, Mount Gay estate, 250 feet, April 3 and 6, on foliage in dry second-growth woods.

TETRASTICHODES FLAVIPES, sp. n.

♀. Length 1.1 mm.; expanse 2.1 mm. Occiput, pronotum, and sides of mesoscutum finely punctate, mesoscutum striate-punctate in middle; scutellum irregularly striate; vertex nearly smooth, face with fine close round punctures; metanotal carina distinct, complete, lateral spaces striate; pleura and outer side of coxæ punctate; abdomen closely and uniformly reticulate punctate, segments 2, 3, and 5 subequal in length, 4 a little longer; antennæ with the three oval funicle-joints subequal in length, each twice as long as wide; club long oval, as long as two preceding funicle-joints together, its basal joint unusually well separated. General colour black with slight greenish metallic lustre; all legs, including tips of coxæ, and all of antennæ honey-yellow; wings hyaline.

One female, St. George's, March 2, 250 feet.

TETRASTICHODES NIGRISCAPUS, sp. n.

♀. Length 1.2 mm.; expanse 2.4 mm. Sculpturing in

general like preceding species but somewhat finer. Abdomen broad oval, nearly circular, flattened; relative length of segments as with preceding species; funicle-joints of antennæ flattened, subequal in length and breadth, subrectangular, hairy. General colour dark metallic green; all femora and tibiæ honey-yellow, except hind femora which are concolorous with body, light at each end; antennæ including scape black; wings hyaline, veins dark brown.

One female, Balthazar, April 5, 250 feet, open place, on bush at sunset.

CERATONEURA, *Ashmead*.

CERATONEURA PETIOLATA.

Ceratoneura petiolata, *Ashmead*, *Linn. Journ.*, *Zool.* xxv. p. 179. St. Vincent.

Two females, Balthazar and Mount Gay estate, April 6 and 7, 250 feet, on herbage near stream and dry second-growth woods.

PENTASTICHUS, *Ashmead*.

PENTASTICHUS LONGIOR, sp. n.

♀. Length 1.16 mm.; expanse 1.8 mm. Body rather slender; abdomen pointed, as long as head and thorax together; head and mesonotum shining, extremely delicately shagreened; metanotum without median carina. Colour black, with slight metallic reflections; antennæ dark honey-yellow, pedicel darker; pubescence on club whitish; tegulæ dark brown; all legs light yellowish; femora black, light at each end; wings hyaline, veins light brown.

One female, Balthazar, April 7, 250 feet, herbage near stream.

PENTASTICHUS FLAVUS, sp. n.

♀. Length 0.81 mm.; expanse 1.86 mm. Body stout, compact, flattened from above; abdomen broad oval, nearly circular, as broad as thorax and somewhat shorter. Antennæ short, rather slender, not gradually but abruptly clavate. Colour light, almost translucent yellow, like that of *Aphelinus*; eyes and ocelli dark red; antennæ a little darker towards tip; wing-veins yellowish.

One female, Balthazar, June 11, 250 feet, flying at sunset after heavy rain.

Subfamily TRICHOGRAMINÆ.

PARACENTROBIA, gen. nov.

Antennæ 6-jointed, funicle 1-jointed, club 3-jointed. Mesopostscutellum plainly discernible, with a triangular projection from its extremity somewhat as with *Perissopterus* (subfamily *Aphelininæ*). Fore wings broad, with a short but close-set marginal cilia beginning on apical fore border and extending around on hind border nearly to base; discal cilia very numerous and very close-set, but arranged in regular rows. Submarginal and marginal veins short, postmarginal lacking; stigmal curving abruptly down into the disc of wing at half wing-length and somewhat knobbed at tip.

PARACENTROBIA PUNCTATA, sp. n.

♀. Length 1.0 mm.; expanse 2.1 mm. Scape stout, somewhat swollen; pedicel subtriangular, two and a half times as long as thick, the sole funicle-joint cup-shaped, less than half as long as pedicel; joint 1 of club as broad as long, longer and broader than funicle-joint and also somewhat cup-shaped; joint 2 of club cylindrical, as long and as wide as joint 1, joint 3 attenuated, pointed, and as long as 2. Abdomen long, slender, pointed, longer than thorax and head together. General colour orange-yellow; eyes red; antennæ and legs pallid, femora somewhat dusky in middle; each segment of abdomen with a black dot on outer margin; wing-veins dark brown; thorax not punctured.

One female, Mount Gay estate, April 1, 250 feet, on window in house.
